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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,302	12/31/2003	Thomas J. Drury	X-9449	8423

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EXAMINER	
CHANG, VICTOR S	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/748,302	**Applicant(s)** DRURY, THOMAS J.	
	Examiner Victor S. Chang	**Art Unit** 1771	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 23 August 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): Rejections of claims 18-21 under 112, 1st paragraph.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: 1-22.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached NOTE.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☐ Other: _____.

NOTE

1. Upon reconsideration, applicant's argument the "substantially empty cavities" means that the cavities are not filled with liquid or solid material is persuasive, because it is consistent with the commonly meaning of the term "empty" as being a space free of liquid or solid materials, and applicant's statement clarifies the scope of the limitation. The rejection of claims 18-21 under 35 USC 112, 1st paragraph is withdrawn.

2. Applicant pointing [Remarks, page 5, bottom paragraph] to a Declaration submitted 1/25/2006 and argues that the present invention has three surprising and unexpected results over the roller products currently being used: (1) the doubling of the effective use life; (2) a minus defect rate; and (3) a significant reduction of chemical and water usage. A minus defect rate means that the inventive rollers cure manufacturing defects which occur in other areas of the chip manufacture, whereas the prior art rollers have positive defect rates, such as the roller manufactured by Rippey Corporation. However, applicant has failed to provide any factual support that the comparative brushes in the test results, such as the rollers in the marketplace (Exhibit A), the Rippey brush (Exhibit B), or the brush commented by individual consulted (Exhibit C), are made according to the teachings of Bahten, as such the results in the Declaration appear to be unrelated to the grounds of rejection. Further, it is noted that that the instantly claimed structural characteristics (e.g., pore size and distribution, etc.) are absent from the Exhibits, as such it is unclear what relevant brush features are being compared, and how could these results be seen as surprising or unexpected results over Bahten.

Applicant argues [Remarks, page 6, 2nd and 3rd paragraphs] that Bahten uses starch as the pore former, and starch can remain trapped in the material causing contamination; the starch also combine with the sponge to form a surface skin which would require greater liquid flow pressure in use, results in higher usage of chemical and water; and the breakdown of the skin material shortens the use life. However, nowhere is there a disclosure by Bahten that the sponge must be made with a starch pore former. Further, none of the above-mentioned structural limitations are present in any of the claims, i.e., the claims fail to preclude the Bahten reference. Finally, applicant is reminded that Bahten does teach an ultra clean "scrubbing" brush (cleaning device) for the manufacturing of integrated circuits, as such even if starch is used as a pore former, a suitably clean sponge is reasonably considered to be either anticipated by Bahten, or obviously provided by practicing the inventiono of the prior art. Applicant's argument is not found convincing for above-mentioned reasons and especially in the absence of any factual evidence that Bahten sponge necessarily forms and/or retains a skin layer.

Applicant argues [Remarks, page 6, 4th paragraph] that Bahten does not teach the production of a shaped body, the uniformity and size distribution of the pores within a narrow range as claimed. However, Bahten does teach a polyvinyl acetal porous elastic material having an average pore size 10 to 200 microns, and may be shaped as a roller which may have a smooth surface, or may be shaped as a pad or a disk. The roller may have an outer diameter of about 60 mm and an inner diameter of about 32 mm. Applicant's argument that Bahten does not teach the production of a shaped body is unpersuasive. As to the uniformity and size distribution of the pores, since Bahten does teach the same the same subject matter (an ultra clean "scrubbing" brush), comprised of the same polyvinyl acetal porous elastic material, and for the same

application (manufacturing of integrated circuits), a suitable uniformity and size distribution of the pores are reasonably considered to be either anticipated by Bahten, or obviously provided by practicing the invention of prior art. In particular, when one considers that it is known that cleaning PVA foam having a controlled uniform pore size and uniform pore distribution is a desirable feature, as evidenced by the teachings of Rosenblatt. Applicant's argument is unpersuasive.

Finally, applicant argues [Remarks, page 8] that nowhere does Bahten teaches "bubble point pressure", "mean flow pre pressure", "cleaning solvent flow rate through the roller", or "dry flow rate". However, while Bahten is silent about the measurements of these properties, since Bahten does teach the same the same subject matter (an ultra clean "scrubbing" brush), comprised of the same polyvinyl acetal porous elastic material, and for the same application (manufacturing of integrated circuits), these properties are reasonably considered to be either anticipated by Bahten, or obviously provided by practicing the invention of prior art as well. It should be noted that mere recognition of undocumented properties in the prior art does not render nonobvious an otherwise known invention.

Vila Chaj
Examiner

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